

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Chikamatsu
Serial No.: Not yet assigned
Filed: herewith
For: VECTOR-DETECTING APPARATUS AND IMPEDANCE
MEASURING APPARATUS
Art Unit: Not yet assigned
Examiner: Not yet assigned
Confirmation No.: Not yet assigned
Customer No.: 27,623
Attorney Docket No.: 40020852-02

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Dear Sir:

In accordance with applicant's duty of disclosure under 37 C.F.R. §1.56, please find attached hereto form PTO-1449 listing information which may be material to the patentability of this application, filed concurrently herewith. This Information Disclosure Statement is being filed:


- XXX Within three (3) months of the filing date of the national application;
- _____ Within three (3) months of the date of entry of the national stage as set forth in 37 C.F.R. §1.491 in an international application;
- _____ Before the mailing date of a first Office Action on the merits;
- _____ After the filing date or date of first Office Action, but before the mailing date of a final action under 37 C.F.R. §1.113, provided that this occurs prior to the issuance of a Notice of Allowance and provided that this I.D.S. is accompanied by either a certification as specified in 37 C.F.R. §1.97(e) or the fee set forth in 37 C.F.R. §1.17(p);

- _____ After the filing date or date of first Office Action, but before the mailing date of a Notice of Allowance under 37 C.F.R. §1.311, provided that this occurs prior to the final action and provided that this I.D.S. is accompanied by either a certification as specified in 37 C.F.R. §1.97(e) or the fee set forth in 37 C.F.R. §1.17(p);
- _____ After the mailing date of a final action under 37 C.F.R. §1.113, provided that this occurs prior to the issuance of a Notice of Allowance and provided that this I.D.S. is accompanied by a certification as specified in 37 C.F.R. §1.97(e) and the fee set forth in 37 C.F.R. §1.17(p); and
- _____ After the mailing date of a Notice of Allowance under 37 C.F.R. §1.311, provided that this occurs prior to or subsequent to the payment of the Issue Fee and provided that this I.D.S. is accompanied by a certification as specified in 37 C.F.R. §1.97(e) and the fee set forth in 37 C.F.R. §1.17(p).
- _____ Filing with RCE Under 37 CFR 1.114.

Cited in the attached PTO-1449 are U.S. Patent No. 4,888,701; Japanese Publication Noss. 09-281163, 05-119078 and 50-133423 and Articles entitled, "LOW-IF TOPOLOGIES FOR HIGH PERFORMANCE ANALOG..." Copied of these references are attached.

It should be understood that attention has been called to the references that have been deemed to be pertinent to the claimed present invention. In concluding what was pertinent, the criteria employed was considered most appropriate in light of the invention shown in the present application. However, the Examiner or others may deem some other criteria to be just as appropriate or more appropriate. Therefore, the Examiner is respectfully urged to review the listed references and to make the usual careful independent search for other prior art that may be pertinent.

Respectfully submitted,



March 25, 2004

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FORM PTO-1449 INFORMATION DISCLOSURE CITATION IN AN APPLICATION (Use several sheets if necessary)	Docket Number (Optional)	Application Number
	40020852-02	Not yet assigned
	Applicant	
	Chikamatsu	
Filing Date	Group Art Unit	
herewith	Not yet assigned	

U. S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	4,888,701	12/19/89	Wakasugi et al.	364	482	

FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
						YES	NO
	09-281163	31.10.97	Japan			X	
	05-119078	14.05.93	Japan			X	
	50-133423	10.4.74	Japan				X

OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, Etc.)

	Crols, J. et al. "LOW-IF TOPOLOGIES FOR HIGH-PERFORMANCE ANALOG FRONT ENDS OF FULLY INTEGRATED RECEIVERS," IEEE Transactions on Circuits and Systems-II: Analog and Digital Signal Processing, Vol. 45, No. 3, March 1998.

EXAMINER	DATE CONSIDERED
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EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP §609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.